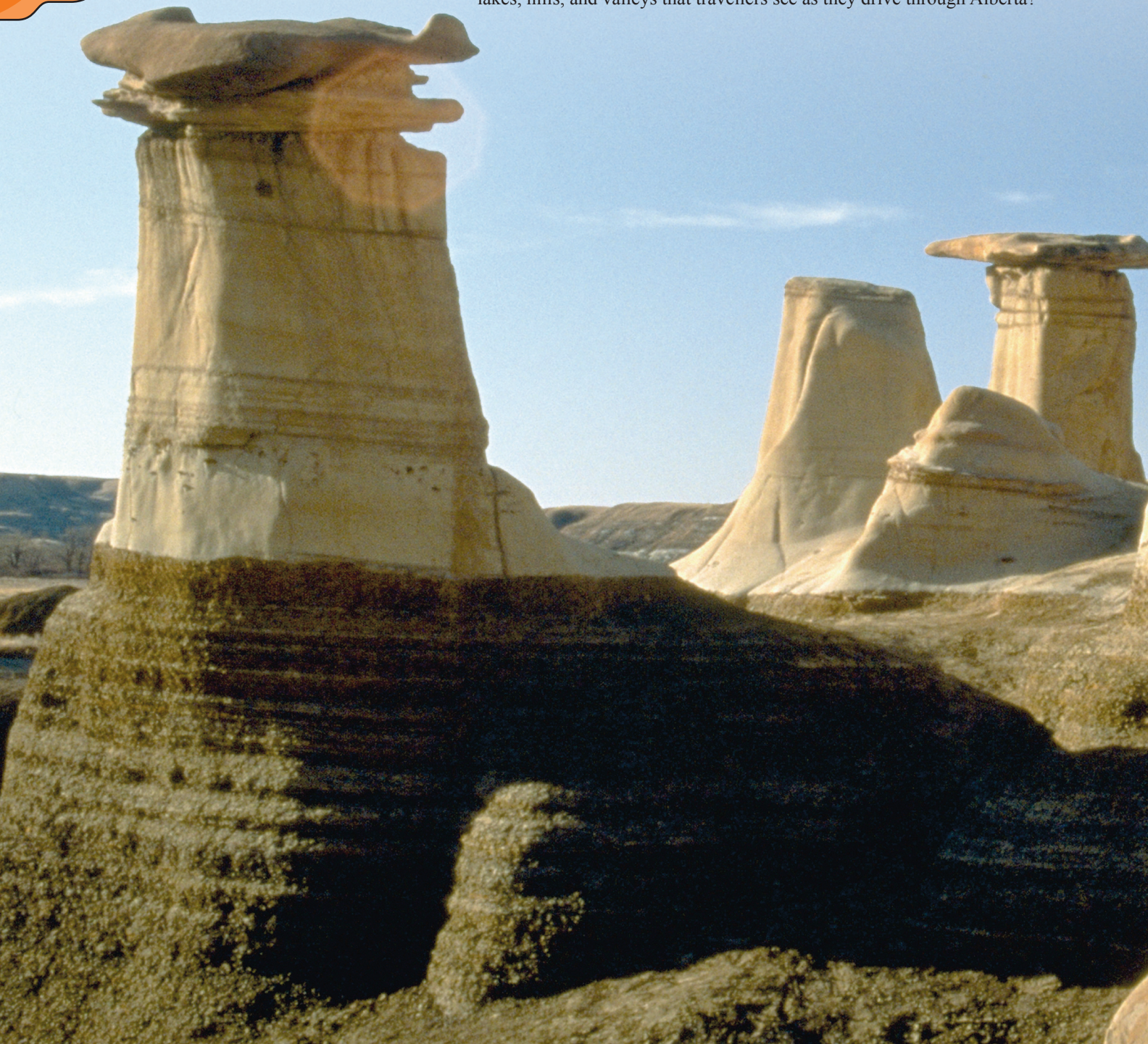
Unit C The Changing Earth

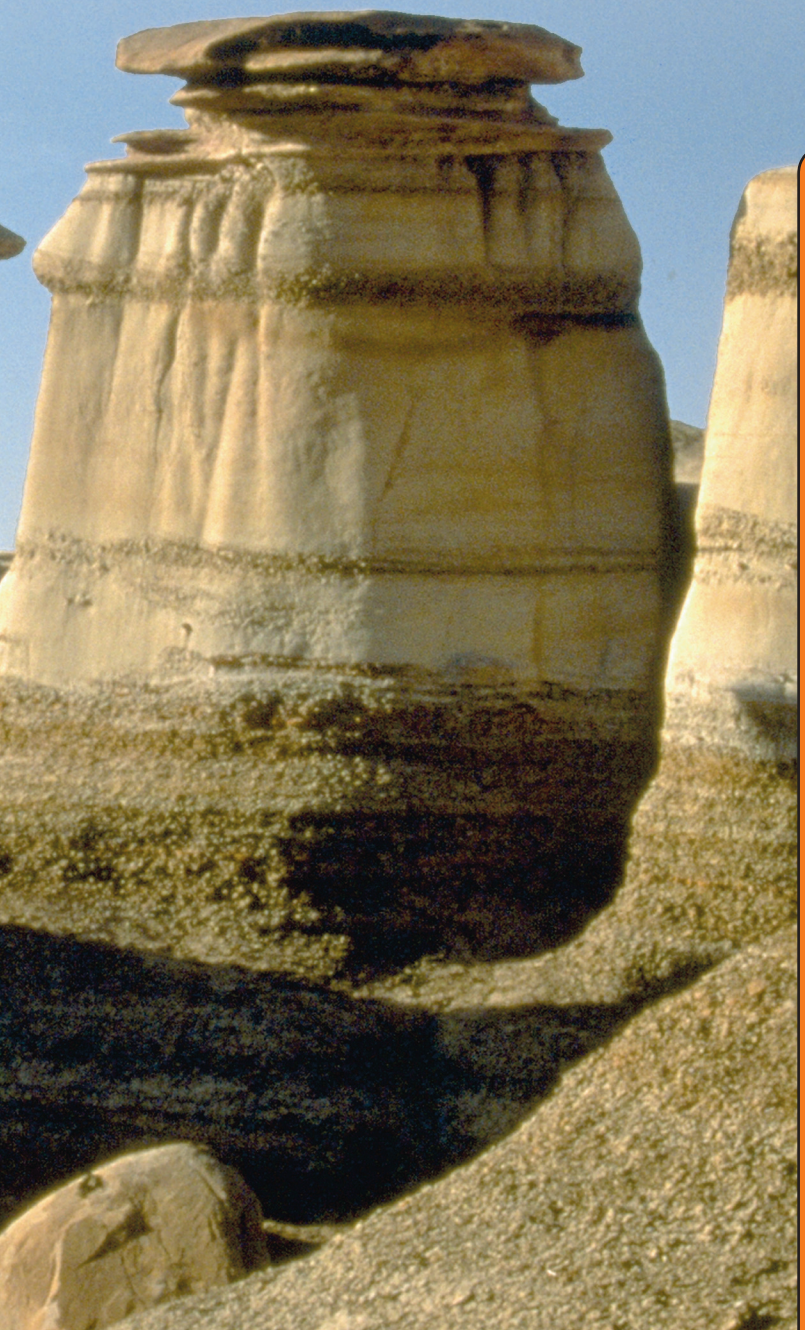
Tourists come from all over the world to enjoy Alberta's natural beauty. They show up for the variety. Few places in the world enable you to enjoy such a range of striking landscapes. Tourists can marvel at the wilderness of the Canadian Shield in the north, the splendour of the Rocky Mountains to the west, the eeriness of the Badlands in the south, and the peacefulness of the interior plains.

Most Albertans already appreciate that they live in a province with contrasting landscapes. As you drive across the province you may have wondered how these unique landscapes got to be the way they are. While looking at a map of Alberta you may ask yourself many questions. How did those mountains form? How long have they been there? Why are the prairies so much flatter than the mountains? What forces created the many lakes, hills, and valleys that travellers see as they drive through Alberta?



In Unit C you will take a road trip around Alberta to visit some of the places that provide answers to these questions. Alberta is one of the best destinations in the world for discovering answers to the many mysteries of the past. You can catch unique glimpses of the relentless forces capable of pushing up mountains and making prairies flat. These forces have not only shaped Alberta's landscapes, but have also provided it with a wealth of natural resources. Understanding these forces is the key to seeing into Alberta's past, present, and future.

As you take this trip you will travel forward through time, starting when Earth was newly formed and ending with the present day. You will witness how much Alberta has changed over 4.5 billion years. You will visit a lifeless land plagued with deadly gases, a tropical reef that's home to surreal creatures unlike anything alive today, a warm inland sea deep enough to support fierce marine reptiles, a rain forest dominated by the largest land animals ever, and an endless desert of ice more than a kilometre thick.



What You Will Cover

Chapter 1: The Abyss of Time

1.1 The Long Beginning
1.2 Early Life
1.3 Strange Rocks
1.4 Getting a Handle on Time
1.5 Pinpointing Time

Chapter 2: A Tropical Alberta

2.1 The Cambrian Explosion
2.2 A Billion-Dollar Reef
2.3 Earthquakes
2.4 Raising the Rockies

Chapter 3: Changing Climates

3.1 The Great Cooling
3.2 The Icy Epoch
3.3 Explaining and Predicting Climate Change